

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

1888

10

51

1

**Complete if Known**

Application Number	10/652,135
Filing Date	08/29/2003
First Named Inventor	May et al.
Group Art Unit	2183
Examiner Name	N/A
Attorney Docket Number	CML00769D

U.S. PATENT DOCUMENTS

**FOREIGN PATENT DOCUMENTS**

**Examiner**

/Tonia Meonske/

**Date  
Considered**

05/31/2007

EXAMINER: Tonia Meonske / Examiner Signature  
SIGNATURE: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation, if not in conformance and not considered. Include copy of this form with the application. A copy of this document will be sent to the applicant by the two-letter code (WIPO Standard ST.3). \* For Japanese patent documents, the Japanese text of this document will be sent to the applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code. <sup>4</sup> Year of the year of the filing of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English Language Translation is stated.   
If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

**BEST AVAILABLE COPY**



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

1

of

2

**Complete if Known**

Application Number	10/652,135
Filing Date	8/29/2003
First Named Inventor	May
Art Unit	2183
Examiner Name	Meonske, Tonia
Attorney Docket Number	CML00769D

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number - Kind Code <sup>3</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
/TM/		3,718,912	Feb-73	Hasbrouck et al.	
		4,128,880	Dec-78	Cray Jr.	
		4,744,043	May-88	Kloker	
		4,760,545	Jul-88	Inagami et al.	
		4,807,183	Feb-89	Kung et al.	
		4,825,361	Apr-89	Omada et al.	
		4,918,600	Apr-90	Harper et al.	
		5,206,822	Apr-93	Taylor	
		5,367,494	Nov-94	Shebanow et al.	
		5,390,352	Feb-95	Kinoshita	
		5,450,607	Sep-95	Kowalczyk et al.	
		5,495,617	Feb-96	Yamada	
		5,652,909	Jul-97	Kodosky	
		5,697,788	Dec-97	Ohta	
		5,717,947	Dec-98	Gallup et al.	
		5,719,998	Feb-98	Ku et al.	
		5,734,863	Mar-98	Kodosky et al.	
		5,764,787	Jun-98	Nickerson	
		5,790,877	Aug-98	Nishiyama et al.	
		5,805,614	Sep-98	Norris	
		5,821,934	Oct-98	Kodosky et al.	
		5,881,257	Mar-99	Glass et al.	
		5,881,263	Mar-99	York et al.	
		5,887,183	Mar-99	Agarwal et al.	
		5,893,143	Apr-99	Tanaka et al.	
		5,936,953	Aug-99	Simmons	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>

Examiner Signature	/Tonia Meonske/	Date Considered	05/31/2007
--------------------	-----------------	-----------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.

<sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**Substitute for form 1449A/PTO**

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
*(use as many sheets as necessary)*

Sheet 2 of 2

<p>Substitute for form 1449A/PTO</p> <p><b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i></p>				<p><b>Complete if Known</b></p> <table border="1"> <tr> <td>Application Number</td> <td>10/652,135</td> </tr> <tr> <td>Filing Date</td> <td>8/29/2003</td> </tr> <tr> <td>First Named Inventor</td> <td>May</td> </tr> <tr> <td>Art Unit</td> <td>2183</td> </tr> <tr> <td>Examiner Name</td> <td>Meonske, Tonia</td> </tr> <tr> <td>Attorney Docket Number</td> <td>CML00769D</td> </tr> </table>		Application Number	10/652,135	Filing Date	8/29/2003	First Named Inventor	May	Art Unit	2183	Examiner Name	Meonske, Tonia	Attorney Docket Number	CML00769D
Application Number	10/652,135																
Filing Date	8/29/2003																
First Named Inventor	May																
Art Unit	2183																
Examiner Name	Meonske, Tonia																
Attorney Docket Number	CML00769D																
Sheet	2	of	2														

U.S. PATENT DOCUMENTS

**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See *Kinds Codes of USPTO Patent Documents* at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.

**Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of**

the reign of the Emperor must precede the serial number of the patent document.<sup>5</sup> Kind of document by the appropriate symbols as indicated on the

document under WIPO Standard ST. 16 if possible. \*Applicant is to place a check mark here if English language Translation is attached.  
Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE  
do not respond to a collection of information unless it displays a valid OMB

**Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.**

<p>Substitute for form 1449A/PTO</p> <p><b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i></p>				<p><b>Complete if Known</b></p> <table border="1"> <tr> <td>Application Number</td> <td>10/652,135</td> </tr> <tr> <td>Filing Date</td> <td>8/29/2003</td> </tr> <tr> <td>First Named Inventor</td> <td>May</td> </tr> <tr> <td>Art Unit</td> <td>2183</td> </tr> <tr> <td>Examiner Name</td> <td>Meonske, Tonia</td> </tr> <tr> <td colspan="2">Attorney Docket Number</td> </tr> </table>		Application Number	10/652,135	Filing Date	8/29/2003	First Named Inventor	May	Art Unit	2183	Examiner Name	Meonske, Tonia	Attorney Docket Number	
Application Number	10/652,135																
Filing Date	8/29/2003																
First Named Inventor	May																
Art Unit	2183																
Examiner Name	Meonske, Tonia																
Attorney Docket Number																	
Sheet	1	of	1	CML00769D													

**U.S. PATENT DOCUMENTS**

## FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)			

Examiner Signature	/Tonia Meonske/	Date Considered	05/31/2007
--------------------	-----------------	-----------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>2</sup>See *Kinds Codes of USPTO Patent Documents* at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.

<sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English/Japanese Translation is attached.

document under WIPO Standard ST. 16 if possible. "Applicant is to place a check mark here if English language Translation is attached.  
Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<p>Substitute for form 1449A/PTO</p> <p><b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i></p>				<p><b>Complete if Known</b></p> <table border="1"> <tr> <td>Application Number</td> <td></td> </tr> <tr> <td>Filing Date</td> <td></td> </tr> <tr> <td>First Named Inventor</td> <td>Philip E. MAY</td> </tr> <tr> <td>Art Unit</td> <td></td> </tr> <tr> <td>Examiner Name</td> <td></td> </tr> <tr> <td>Attorney Docket Number</td> <td>CML00769D</td> </tr> </table>		Application Number		Filing Date		First Named Inventor	Philip E. MAY	Art Unit		Examiner Name		Attorney Docket Number	CML00769D
Application Number																	
Filing Date																	
First Named Inventor	Philip E. MAY																
Art Unit																	
Examiner Name																	
Attorney Docket Number	CML00769D																
Sheet	1	of	1														

Examiner Signature	/Tonia Meonske/	Date Considered	05/31/2007
--------------------	-----------------	-----------------	------------

**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.

Applicant's unique creation designation number (optional). See also Codes of Practice, Part 1, Annex 2, Section 1.1.1.1. For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated

**Applicant is to place a check mark here if English language Translation is attached.**

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any

Comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20591.

Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for

Patents, Washington, DC 20231.



PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
(use as many sheets as necessary)

Sheet

1

of

1

**Complete if Known**

Application Number	10/652,135
Filing Date	8/29/2003
First Named Inventor	May
Art Unit	2183
Examiner Name	Meonske, Tonia
Attorney Docket Number	CML00769D

**OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cita. No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
/TM/		LAM, M., Software Pipelining: An Effective Scheduling Technique for VLIW Machines, Proceedings of the SIGPLAN '88 Conference on Programming Language Design and Implementation, Atlanta, Georgia, June 22-24, 1988, pp. 318-328	
		LEE, T. et al., A Transformation-Based Method for Loop Folding, IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, Vol. 13, No. 4, April 1994, pp. 439-450	
		KAVI, K.M. et al., A Formal Definition of Data Flow Graph Models, IEEE Transactions on Computers, Vol C-35, No. 11, Nov 1986, pp. 940-948	
		COOPER, K.D. et al., Efficient Computation of Flow Insensitive Interprocedural Summary Information, SIGPLAN Notices, Vol. 19, No. 6, June 1984, pp. 247-258	
		STRONG, H.R., Vector Execution of Flow Graphs, Journal of the Association for Computing Machinery, Vol 39, No. 1, January 1983, pp. 186-196	
		AIKEN, A. et al., Resource-Constrained Software Pipelining, IEEE Transactions on Parallel and Distributed Systems, Vol. 6, No. 12, December 1995, pp. 1248-1270	
		WULF, WILLIAM A. "Evaluation of the WM Architecture." Proceedings of the 19 <sup>th</sup> Annual International Symposium on Computer Architecture: 1992, pp. 382-390, ACM 0-89791-509-7/92/0005/0382.	
		TALLA, D., Architectural techniques to Accelerate Multimedia Applications on General-Purpose Processors, Dissertation, August 2001, pp. 94-125	
↓		TALLA, D., Bottlenecks in Multimedia Processing with SIMD Style Extensions and Architectural Enhancements, IEEE Transactions of Computers, August 2003, pp. 1015-1031, Vol. 62, No. 8, IEEE	

Examiner Signature	/Tonia Meonske/	Date Considered	05/31/2007
--------------------	-----------------	-----------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231



PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0851-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

**7.7 & 7.8** Under the Paperwork Reduction Act of 1985, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**Substitute for form 1449B/PTO**

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
*(use as many sheets as necessary)*

## Sheet

1

of

1

**Complete If Known**

Application Number	10/652,135
Filing Date	8/29/2003
First Named Inventor	May
Art Unit	2183
Examiner Name	Meonske, Tonia
Attorney Docket Number	CML00769D

#### OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Signature	/Tonia Meonske/	Date Considered	05/31/2007
--------------------	-----------------	-----------------	------------

**\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.**

**'Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.**

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231